

Amendments to the Specification:

Please replace the paragraph beginning on line 5 of page 4 with the following amended paragraph:

The present invention is a chemical treatment method and chemical treatment apparatus by which a metal film formed on a material to be subjected to film formation is etched into a predetermined pattern. According to a first aspect of the present invention, an electrolysis reduction treatment is performed for a metal film as a cathode by using one of an acidic treatment solution containing acid radicals and an alkaline treatment solution containing halogen ions. The metal film is then dipped in another acidic treatment solution. Preferred examples of the acidic treatment solution containing acid radicals are hydrochloric acid (HCl), sulfuric acid (H_2SO_4), carboxylic acid (RCOOH), ~~hydrogen fluoride~~ hydrofluoric acid (HF), and phosphoric acid (H_3PO_4). Preferred examples of the halogen ions are sodium chloride (NaCl), potassium chloride (KCl), and potassium iodide (KI). Preferably, another acidic treatment solution contains halogen ions.

Please replace the paragraph bridging pages 11 and 12 with the following amended paragraph:

After that, the material 100 shown in FIG. 2E is used as a cathode to perform electrolysis reduction by nascent hydrogen for the chromium film 120 by using a predetermined treatment solution. This electrolysis reduction treatment will be referred to as "a cathode electrolysis reduction treatment" hereinafter, and a process of performing this treatment will be referred to as "a cathode electrolysis reduction process" hereinafter. A treatment solution of this cathode electrolysis reduction treatment is one of an acidic treatment solution containing an acid radical and an alkaline treatment solution containing halogen ion. A treatment solution is preferably an acid-radical-containing acidic treatment solution, e.g., hydrochloric acid, sulfuric acid, carboxylic acid, or ~~hydrogen fluoride~~ hydrofluoric acid. For example, a chloride-ion-containing treatment solution such as SAS manufactured by K.K. MURATA is used.